

SEQUENCE LISTING

<110> Novartis AG

<120> Novel G-Protein Coupled Receptors and DNA Sequences Thereof

<130> 4-33201P1

<160> 6

<170> PatentIn version 3.1

<210> 1

<211> 365

<212> PRT

<213> Homo sapiens

<220>

<221> PEPTIDE

<222> (1)..(365)

<223>

<400> 1

Met Gly Asn Ile Thr Ala Asp Asn Ser Ser Met Ser Cys Thr Ile Asp
1 5 10 15

His Thr Ile His Gln Thr Leu Ala Pro Val Val Tyr Val Thr Val Leu
20 25 30

Val Val Gly Phe Pro Ala Asn Cys Leu Ser Leu Tyr Phe Gly Tyr Leu
35 40 45

Gln Ile Lys Ala Arg Asn Glu Leu Gly Val Tyr Leu Cys Asn Leu Thr
50 55 60

Val Ala Asp Leu Phe Tyr Ile Cys Ser Leu Pro Phe Trp Leu Gln Tyr
65 70 75 80

Val Leu Gln His Asp Asn Trp Ser His Gly Asp Leu Ser Cys Gln Val
85 90 95

Cys Gly Ile Leu Leu Tyr Glu Asn Ile Tyr Ile Ser Val Gly Phe Leu

100 105 110

Cys Cys Ile Ser Val Asp Arg Tyr Leu Ala Val Ala His Pro Phe Arg
115 120 125

Phe His Gln Phe Arg Thr Leu Lys Ala Ala Val Gly Val Ser Val Val
130 135 140

Ile Trp Ala Lys Glu Leu Leu Thr Ser Ile Tyr Phe Leu Met His Glu
145 150 155 160

Glu Val Ile Glu Asp Glu Asn Gln His Arg Val Cys Phe Glu His Tyr
165 170 175

Pro Ile Gln Ala Trp Gln Arg Ala Ile Asn Tyr Tyr Arg Phe Leu Val
180 185 190

Gly Phe Leu Phe Pro Ile Cys Leu Leu Leu Ala Ser Tyr Gln Gly Ile
195 200 205

Leu Arg Ala Val Arg Arg Ser His Gly Thr Gln Lys Ser Arg Lys Asp
210 215 220

Gln Ile Gln Arg Leu Val Leu Ser Thr Val Val Ile Phe Leu Ala Cys
225 230 235 240

Phe Leu Pro Tyr His Val Leu Leu Val Arg Ser Val Trp Glu Ala
245 250 255

Ser Cys Asp Phe Ala Lys Gly Val Phe Asn Ala Tyr His Phe Ser Leu
260 265 270

Leu Leu Thr Ser Phe Asn Cys Val Ala Asp Pro Val Leu Tyr Cys Phe
275 280 285

Val Ser Glu Thr Thr His Arg Asp Leu Ala Arg Leu Arg Gly Ala Cys
290 295 300

Leu Ala Phe Leu Thr Cys Ser Arg Thr Gly Arg Ala Arg Glu Ala Tyr
305 310 315 320

Pro Leu Gly Ala Pro Glu Ala Ser Gly Lys Ser Gly Ala Gln Gly Glu
325 330 335

Glu Pro Glu Leu Leu Thr Lys Leu His Pro Ala Phe Gln Thr Pro Asn
340 345 350

Ser Pro Gly Ser Gly Phe Pro Thr Gly Arg Leu Ala
355 360 365

<210> 2

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> this peptide is used to generate an antibody to OGR1

<220>

<221> PEPTIDE

<222> (1)..(16)

<223>

<400> 2

Cys Phe Val Ser Glu Thr Thr His Arg Asp Leu Ala Arg Leu Arg Gly
1 5 10 15

<210> 3

<211> 362

<212> PRT

<213> Homo sapiens

<220>

<221> PEPTIDE

<222> (1)..(362)

<223>

<400> 3

Met Gly Asn His Thr Trp Glu Gly Cys His Val Asp Ser Arg Val Asp
1 5 10 15

His Leu Phe Pro Pro Ser Leu Tyr Ile Phe Val Ile Gly Val Gly Leu
20 25 30

Pro Thr Asn Cys Leu Ala Leu Trp Ala Ala Tyr Arg Gln Val Gln Gln
35 40 45

Arg Asn Glu Leu Gly Val Tyr Leu Met Asn Leu Ser Ile Ala Asp Leu
50 55 60

Leu Tyr Ile Cys Thr Leu Pro Leu Trp Val Asp Tyr Phe Leu His His
65 70 75 80

Asp Asn Trp Ile His Gly Pro Gly Ser Cys Lys Leu Phe Gly Phe Ile
85 90 95

Phe Tyr Thr Asn Ile Tyr Ile Ser Ile Ala Phe Leu Cys Cys Ile Ser
100 105 110

Val Asp Arg Tyr Leu Ala Val Ala His Pro Leu Arg Phe Ala Arg Leu
115 120 125

Arg Arg Val Lys Thr Ala Val Ala Val Ser Ser Val Val Trp Ala Thr
130 135 140

Glu Leu Gly Ala Asn Ser Ala Pro Leu Phe His Asp Glu Leu Phe Arg
145 150 155 160

Asp Arg Tyr Asn His Thr Phe Cys Phe Glu Lys Phe Pro Met Glu Gly
165 170 175

Trp Val Ala Trp Met Asn Leu Tyr Arg Val Phe Val Gly Phe Leu Phe
180 185 190

Pro Trp Ala Leu Met Leu Leu Ser Tyr Arg Gly Ile Leu Arg Ala Val
195 200 205

Arg Gly Ser Val Ser Thr Glu Arg Gln Glu Lys Ala Lys Ile Lys Arg
210 215 220

Leu Ala Leu Ser Leu Ile Ala Ile Val Leu Val Cys Phe Ala Pro Tyr
225 230 235 240

His Val Leu Leu Leu Ser Arg Ser Ala Ile Tyr Leu Gly Arg Pro Trp
245 250 255

Asp Cys Gly Phe Glu Glu Arg Val Phe Ser Ala Tyr His Ser Ser Leu
260 265 270

Ala Phe Thr Ser Leu Asn Cys Val Ala Asp Pro Ile Leu Tyr Cys Leu
275 280 285

Val Asn Glu Gly Ala Arg Ser Asp Val Ala Lys Ala Leu His Asn Leu
290 295 300

Leu Arg Phe Leu Ala Ser Asp Lys Pro Gln Glu Met Ala Asn Ala Ser
305 310 315 320

Leu Thr Leu Glu Thr Pro Leu Thr Ser Lys Arg Asn Ser Thr Ala Lys
325 330 335

Ala Met Thr Gly Ser Trp Ala Ala Thr Pro Pro Ser Gln Gly Asp Gln
340 345 350

Val Gln Ieu Lys Met Leu Pro Pro Ala Gln
355 360

<210> 4

<211> 337

<212> PRT

<213> Homo sapiens

<220>

<221> peptide

<222> (1)..(337)

<223>

<400> 4

Met Asn Ser Thr Cys Ile Glu Glu Gln His Asp Leu Asp His Tyr Leu
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Phe Pro Ile Val Tyr Ile Phe Val Ile Ile Val Ser Ile Pro Ala Asn
20 25 30

Ile Gly Ser Leu Cys Val Ser Phe Leu Gln Pro Lys Lys Glu Ser Glu
35 40 45

Leu Gly Ile Tyr Leu Phe Ser Leu Ser Leu Ser Asp Leu Leu Tyr Ala
50 55 60

Leu Thr Leu Pro Leu Trp Ile Asp Tyr Thr Trp Asn Lys Asp Asn Trp
65 70 75 80

Thr Phe Ser Pro Ala Leu Cys Lys Gly Ser Ala Phe Leu Met Tyr Met
85 90 95

Lys Phe Tyr Ser Ser Thr Ala Phe Leu Thr Cys Ile Ala Val Asp Arg
100 105 110

Tyr Leu Ala Val Val Tyr Pro Leu Lys Phe Phe Phe Leu Arg Thr Arg
115 120 125

Arg Ile Ala Leu Met Val Ser Leu Ser Ile Trp Ile Leu Glu Thr Ile
130 135 140

Phe Asn Ala Val Met Leu Trp Glu Asp Glu Thr Val Val Glu Tyr Cys
145 150 155 160

Asp Ala Glu Lys Ser Asn Phe Thr Leu Cys Tyr Asp Lys Tyr Pro Leu
165 170 175

Glu Lys Trp Gln Ile Asn Leu Asn Leu Phe Arg Thr Cys Thr Gly Tyr
180 185 190

Ala Ile Pro Leu Val Thr Ile Leu Ile Cys Asn Arg Lys Val Tyr Gln
195 200 205

Ala Val Arg His Asn Lys Ala Thr Glu Asn Lys Glu Lys Lys Arg Ile
210 215 220

Ile Lys Leu Leu Val Ser Ile Thr Val Thr Phe Val Leu Cys Phe Thr
225 230 235 240

Pro Phe His Val Met Leu Leu Ile Arg Cys Ile Leu Glu His Ala Val
245 250 255

Asn Phe Glu Asp His Ser Asn Ser Gly Lys Arg Thr Tyr Thr Met Tyr
260 265 270

Arg Ile Thr Val Ala Leu Thr Ser Leu Asn Cys Val Ala Asp Pro Ile
275 280 285

Leu Tyr Cys Phe Val Thr Glu Thr Gly Arg Tyr Asp Met Trp Asn Ile
290 295 300

Leu Lys Phe Cys Thr Gly Arg Cys Asn Thr Ser Gln Arg Gln Arg Lys
305 310 315 320

Arg Ile Leu Ser Val Ser Thr Lys Asp Thr Met Glu Leu Glu Val Leu
325 330 335

Glu

<210> 5

<211> 19

<212> PRT

<213> Artificial sequence

<220>

<223> this peptide is used to generate an antibody to GPR4

<220>

<221> PEPTIDE

<222> (1)..(19)

<223> peptide 2 for antibody production for GPR4

<400> 5

Arg Ser Asp Val Ala Lys Ala Leu His Asn Leu Leu Arg Phe Leu Ala
1 5 10 15

Ser Asp Lys

<210> 6

<211> 20

<212> PRT

<213> Artificial sequence

<220>

<223> this peptide is used to generate an antibody to GPR4

<220>

<221> peptide

<222> (1)..(20)

<223> peptide for antibody production to GPR4

<400> 6

Asp Glu Leu Phe Arg Asp Arg Tyr Asn His Thr Phe Cys Phe Glu Lys

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5

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15

Phe Pro Met Glu

20